

Taking Switch Users to the Next Level: A Three Step Approach

Feature matching

Student Factors

- Needs
- Abilities
- Expectations

Technology Features

- Interface/Input
- Processing
- Output
- General

Tasks

- Computers are essential tools in education, vocation, and recreation.
- Computer literacy standards
- Used for writing
 - drawing
 - reading
 - banking
 - shopping
- playing
- learning new concepts
- joining discussion groups

Self-Contained Accessible Programs

- Provide a great self-contained learning environment
- Learn to operate one program
- Focus on access method and program, not operating the computer

Some examples

- Clicker 5 - Crick Software [Mac OS X/Windows]
- IntelliTools Classroom Suite - Cambium Learning Systems [Mac OS X/Windows]
- Communicate by Choice - Widget [Windows]
- PixWriter - Slater Software [Mac OS X/Windows]
- Writing with Symbols 2000 - Widget [Windows]
- Speaking Dynamically Pro - Mayer-Johnson [Windows]
- Boardmaker Plus! v. 6 - Mayer-Johnson [Windows]

Think of the tasks both now and in the future

- Use the same software their peers are using:
 - iTunes
 - iPhoto
 - Microsoft Word
 - PowerPoint
 - Keynote
 - Instant Messaging
 - Email
 - Web Browsers
 - Games
- Barrier -access is not built into most consumer and professional software packages

Questions

- When should you try to leave a self-contained program?
- Which individuals should you not try to move out of self-contained programs?
- What things are outside of the self-contained environment the individual needs to do or wants to do?
- How can switch users use the non-adapted-software?
- What benefits would universal access to the computer provide?

Universal Access to Programs

- Greater access to programs that provide:
 - motivation
 - skill training
 - academic learning
 - independence

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Some examples of universal access solutions:

- SwitchXS - AssistiveWare [Mac OS X]
- E Z Keys - Words+ [Windows]
- Discover Envoy, Discover Pro - Madentec [Mac OS X/Windows]
- CrossScanner - RJ Cooper [Mac OS X/Windows; mouse emulation only]
- ScanBuddy - Applied Human Factors [Windows; mouse emulation only]

How can switch users use the non-adapted-software?

A Suggested 3 Step Approach

1. Make sure the student is **comfortable with his or her access method** and a reasonably efficient switch user with the self-contained environment. Once the student knows their way around the program and is ready to explore new things you can move to step 2.
2. Introduce a universal access method that provides full access to the computer through a single switch. Turn off the switch access feature in the self-contained program and let the student access it using the universal switch access software. This way the **individual can explore the new access technology in a familiar environment**. Once the individual is comfortable with the universal access technology and they are ready to explore what new things can be done with that technology you can move to step 3.
3. Consider what activities from the self-contained program the student enjoys most and let the student try using the universal access solution to access similar features in a consumer application. Or, find out what the student would most like to do that was not possible in the other program and look for a consumer application such as iPhoto, iTunes, iMovie, Mail, Firefox, Pages, Word, etc. that does this. **Support the student in exploring the new software using the familiar universal switch access solution.**

Example videos showing benefits of universal access

"One thumb to rule them all"

<http://frontiersofassistivetechology.com/?video=Mike>

"A pivotal role in the household"

<http://frontiersofassistivetechology.com/?video=Marie-France>

References

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